

## Functional Description

The Indicator Driver, ID-1A is a simple current switch for applications where speed is not essential as for driving indicator lamps. This module has been designed for use with both the medium speed "A" family and the high speed "B" family.

### Medium Speed

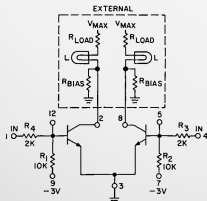
Leave pins 5, 7, 9 and 12 open. The input resistor will load down the normal up level of the driving block (AI-2A, AOI-2A or AI-1A), however the minimum up level will still be above the threshold level.

### High Speed

Leave pins 5 and 12 open, connect pins 9 and 7 to -3 volts. The input resistor will load down the normal up level of the driving block (AOI-1B, AOI-2B, AOI-11B or AOI-22B) however the minimum up level will still be above the threshold level.

The driving module can have both on ID module and diode logic circuits, as loads, or the same net.

## Schematic



## Terminal Configuration



TOP VIEW

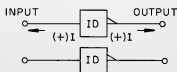
### MEDIUM SPEED-

Pins 5, 7, 9 and 12 Leave Open

### HIGH SPEED-

Pins 5 and 12 Leave Open

## Block Diagram



## Maximum Ratings

Input Voltage = 6V

Output Voltage = 8V

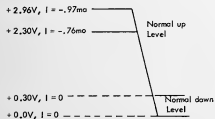
$I_E = 25$  Milliamps

## ID-1A Module Functional Tests

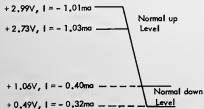
TESTS	TERMINAL CONDITIONS												°C	ADDITIONAL LOAD REQUIREMENTS	VARIABLE	LIMITS		UNITS
	1	2	3	4	5	6	7	8	9	10	11	12				MIN	MAX	
DC ON	+2.3V	$V_0$	GND										25	307Ω FROM TERM. 2 TO +6.24V	$V_0$		0.3	V
DC ON			GND	+2.3V				$V_0$					25	307Ω FROM TERM. 8 TO +6.24V	$V_0$		0.3	V
DC ON	+2.80V	$V_0$	GND						-3.12V				25	178Ω FROM TERM. 2 TO -3.12V	$V_0$		0.3	V
DC ON			GND	+2.80V			-3.12V	$V_0$					25	178Ω FROM TERM. 8 TO -3.12V	$V_0$		0.3	V
DC OFF	1.06V	$V_0$	GND						-2.88V				25	178Ω FROM TERM. 2 TO -2.88V	$V_0$	2.84		V
DC OFF			GND	1.06V			-2.88V	$V_0$					25	178Ω FROM TERM. 8 TO -2.88V	$V_0$	2.84		V

## Input Requirements

### MEDIUM SPEED



### HIGH SPEED



## Output Specifications

Output current = - 19ma @ 0.30V  
(pin 7 and 9 should be left open)

Output current = - 14ma @ 0.30V

### Maximum Power Dissipation (per module)

	ON	OFF
Medium Speed	23.5m watts	0
High Speed	19.0m watts	4.0m watts

$$\text{Average Normal Power Dissipation} = \frac{\text{NOMINAL ON} + \text{NOMINAL OFF}}{2} = 10.5\text{m watts}$$

### General Wiring Rules (for Printed Circuits 10mil width lines)

Input single line length should be less than 12 inches to prevent excessive noise coupling.  
Total net length at the input should not exceed 60 inches.